

Draft 13

21. (Amended) The apparatus of claim 19 in which said interface machine further comprises a personal computer having a soundcard and running an audio streaming program and in which said listening station is a computer running a streaming audio program and having a soundcard electrically connected to a loudspeaker.

22 (Amended) The apparatus of claim 21 in which said soundcard in said listening station further includes a microphone interface.

23. (Amended) The apparatus of claim 19 in which said packet network further comprises an Ethernet connection, and said transmitted stream is addressed only to the listening station and said output stream is addressed only to the interface machine.

Another version of the replacement section, marked up to show all changes relative to the previous version of the section is provided separate from this amendment pursuant to 37 C.F.R. 1.121 (b) (2) (iii). (See Appendix B).

R E M A R K S

Claims 1, 4-10, and 12-23 are pending in the present application.

Rejection Under 35 U.S.C. § 112, first Paragraph and New Matter Rejection

Claims 19-23 are rejected under 35 U.S.C. § 112, first paragraph and 35 U.S.C. § 132. Applicant submits that this rejection is overcome by the above amendments to the specification and claims.

Rejection of Claims 1 and 4-6 under 35 U.S.C. § 103(a)

Claims 1, 4-9 and 12-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,014,431 (McHale) in view of U.S. Patent No. 6,064,673 (Anderson). This rejection is traversed.

Applicant respectfully submits that neither McHale nor Anderson teaches or suggests to convert the telephone signal into an audio output signal and to transmit the audio output signal over a WAN to provide a continuous audio signal at a local location, as recited by independent claims 1, 8 and 19, on which claims 4-7, 9/12-18 and 20-23 respectively depend. The Examiner admits that McHale does not teach this feature. The Examiner asserts that Anderson discloses an interface machine for processing a received telephone signal into a network audio signal and transmitting it via a WAN to a local system as a continuous audio signal. The Examiner relies on Fig. 1 and column 5, lines 5-8 and 46-55 of Anderson for the teaching of this feature. Applicant submits that Anderson does not teach to convert the telephone signal into an audio signal and to transmit the audio output signal over a WAN to provide a continuous audio signal at a local system. Rather, Anderson teaches to convert the entire telephone signal into a digital signal before the telephone signal is transmitted over the WAN (see column 5, lines 10-16; column 6, lines 60 – column 7, line 22). The object of Anderson is to provide real-time communications in a non-guaranteed packet-based network. In contrast, the purpose of the present invention is to enable a remote operator to “listen in” to the actual audio signal at a remote modem in order to diagnose a communication problem without having to travel to the remote modem. Because the system of Anderson converts the entire telephone signal into a digital signal before the signal is transmitted on the WAN 104, the system of Anderson cannot perform this function.

Regarding claim 23, Applicant submits that the office action is completely silent regarding whether the relied on prior art teaches the recited Ethernet connection and the feature by which the transmitted stream is addressed only to the monitoring system and the output stream is addressed only to the interface machine.

Therefore, since McHale and Anderson, either alone or in combination, fail to teach or suggest the invention defined by claims 1, 4-9 and 12-23, Applicant submits that the rejection of claims 1, 4-9 and 12-23 under 35 U.S.C. § 103(a) is improper and respectfully requests that the rejection be withdrawn.

Rejection of Claim 10 under 35 U.S.C. § 103(a)

Claim 10 is rejected under 35 U.S.C. § 103(a) as being unpatentable over McHale in view of Anderson and further in view of U.S. Patent No. 6,122,255 (Bartholomew). This rejection is traversed.

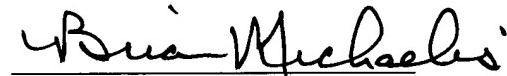
Applicant submits that Bartholomew fails to make up for the above-noted deficiencies of McHale and Anderson. That is, Bartholomew fails to teach or suggest to convert the telephone signal into an audio output signal and to transmit the audio output signal over a WAN, as recited by independent claim 1, on which claim 7 depends.

Therefore, since McHale, Anderson and Bartholomew, either alone or in combination, fail to teach or suggest the invention defined by claim 7, Applicant submits that the rejection of claim 10 under 35 U.S.C. § 103(a) is improper and respectfully requests that the rejection be withdrawn.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such action is hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, he is kindly requested to contact the undersigned at the telephone number listed below.

Please charge any deficiency as well as any other fee(s) which may become due at any time during the pendency of this application, or credit any overpayment of such fee(s) to Deposit Account No. 50-0369. Also, in the event any extensions of time for responding are required for the pending application(s), please treat this paper as a petition to extend the time as required and charge Deposit Account No. 50-0369 therefor.

Respectfully submitted,


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Appendix A

Marked up Copy of Specification

At page 7, second full paragraph

The interface PC 26 receives the audio output signal and prepares it for transmission over the WAN back to the local computer 12. The interface PC 26 runs an audio streaming program 27, such as Real Audio by Progressive Networks, which packetizes and puts the audio signal onto the WAN for transmission to the local computer 12. The local computer 12 suitably equipped with its own soundcard 30 receives from the WAN the packetized audio from the communication to the remote modem 10. The local computer 12 is configured with a similar audio streaming program 34 that de-packetizes the audio communication received over the WAN and can "play" it as continuous time-based audio. In this manner, one can listen to [(i.e., monitor)] the exchange of signals from the local computer 12 to the remote modem 10, over the WAN and at the local computer 12 [monitoring] listening station.

Paragraph spanning bottom of page 7 and top of page 8

The converter 22 is additionally configured so that the connection such as described between the local computer 12 and the remote modem 10, initiated by the local machine 12, can be kept open by making a connection to a remote phone instead of a remote modem. That is, a telephone 36, as known in the art, in this embodiment is connected to the converter 22 at the telephone side of the remote modem 10. Such a connection can be made via a splitter as known in the art. The telephone 36 can be used to provide a telephone audio signal generated by someone speaking into the telephone 36. The telephone audio signal is provided to the converter 22, which in turn provides the converted audio signal to the soundcard 28 on the interface PC 26 that runs the audio streaming program 27 for transmission of the [encoded] audio signal over the WAN. The interface PC 26 running the audio streaming program 27 packetizes and puts the telephone audio signal onto the WAN for transmission to the local computer 12. The local computer 12, suitably equipped with the soundcard 30 and the similar audio streaming program 34 receives the telephone audio signal from the telephone 36 at the telephone side of the remote modem and can "play" it as continuous time-based audio. In this manner, one can listen to a telephone communication introduced at the telephone side of the remote modem, over the WAN

and at the local computer without incurring long distance phone charges (as the phone call is routed over the WAN).

Appendix B

Marked up Copy of Claims

19. (Twice Amended) An apparatus for communicating audio signals between a telephone interface of a remote modem and a [monitoring] listening station via a packet network comprising:

a signal converter electrically connected to said telephone interface of said remote modem and electrically converting between a telephone signal and an electrical audio signal;

an interface machine, electrically connected with said converter, for processing said electrical audio signal to generate a transmitted stream of [encoded] audio data packets and transmitting said stream into a packet network, and for receiving an output stream of [encoded] audio data from said packet network, and for processing said output stream into an electrical audio signal to said signal converter;

a [monitoring] listening station for receiving said transmitted stream of [encoded] audio data packets via said packet network and processing said transmitted stream to generate a continuous output audio signal, and for receiving an audio input signal and processing said signal to generate said output stream of audio data packets, and for transmitting said output stream into a packet network;

whereby an operator at said [monitoring] listening station can listen to the telephone signals of said remote modem and can generate audio signals to be converted into remote telephone signals, without having an electrical audio path from the remote modem to the operator location.

21. (Amended) The apparatus of claim 19 in which said interface machine further comprises a personal computer having a soundcard and running an audio streaming program and in which said [monitoring] listening station is a computer running a streaming audio program and having a soundcard electrically connected to a loudspeaker.

22 (Amended) The apparatus of claim 21 in which said soundcard in said [monitoring] listening station further includes a microphone interface.

23. (Amended) The apparatus of claim 19 in which said packet network further comprises an Ethernet connection, and said transmitted stream is addressed only to the [monitoring system] listening station and said output stream is addressed only to the interface machine.

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